

Sexual Empowerment and Educational Development for Seniors (S.E.E.D.S).  
Planting seeds of knowledge in the prevention of HIV among seniors.

By  
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## Table of Contents

Abstract .....	5
List of Tables.....	7
Glossary.....	9
Chapter I: Introduction.....	10
Chapter II: Literature Review.....	14
Chapter III: Methodology and Design.....	21
Chapter IV: Results.....	24
Chapter V: Discussion and Conclusion.....	38
References .....	44
Appendices .....	47

Dedicated to my family

I would like to thank my parents Ronald and Eileen Bacheller for their love and guidance throughout my education. I would also like to thank my children, Jacob, Sydney and Morgan for their patience and understanding during this journey.

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## Abstract

### Background

The purpose of this study is to examine the effectiveness of an HIV/AIDS prevention program in changing knowledge, skills and risk behaviors in women age fifty and older. The program measured HIV knowledge, safer sex knowledge, communication skills and self efficacy regarding condom use among women living in Lapeer and Genesee County, Michigan. An age-specific HIV/AIDS prevention workshop which incorporates the Health Belief Model and the Theory of Gender and Power was used for the framework.

### Methods

For the purpose of this research a cross-sectional qualitative study consisting of 40 (N=40) women age 50 and older living in Lapeer and Genesee County was conducted using a 20 item self administered pre and post test. Point values were assigned to each question. A point value of zero was given for an incorrect answer. Correct answers were assigned a point value of one, except for cases where importance or confidence was measured. These questions were assigned a zero indicating “no importance” or “no confidence”, a one for “somewhat important” or “somewhat confident” and a 2 for “very important” or “very confident.” Variables measured were age, race and education to determine if a correlation existed regarding HIV knowledge, safer sex knowledge, communication skills and self efficacy regarding condom use efficacy.

### Results

Results of the study indicated no correlations between age and HIV knowledge, safer sex knowledge and self. The study did show an increase in HIV knowledge, safe sex practices, communication skills and self efficacy regarding condoms. HIV pre test

score increased from 72% to 95% at post test. Safer sex practices improved from 68% at pre test to 90% at post test. Communication skills also showed an increase from 40% pre test to 50% post test and self efficacy regarding condom use from 32% pre test to 51% at post test.

## List of Tables

Table 1: Frequency table for participants according to age.....	24
Table 2: Frequency table for participants according to education.....	25
Table 3: Frequency table for participants according to race.....	25
Table 4: Pre test Response: (Q3) .....	27
Table 5: Post test Response: (Q3).....	27
Table 6: Pre test Response: (Q11).....	28
Table 7: Post test Response: (Q11).....	28
Table 8: Pre test Response: (Q12).....	29
Table 9: Post test Response: (Q12).....	29
Table 10: Pre test Response: (Q6).....	30
Table 11: Post test Response: (Q6).....	31
Table 12: Pre test Response: (Q18).....	31
Table 13: Post test Response: (Q18).....	32
Table 14: Pre test Response: (Q5).....	33
Table 15: Post test Response: (Q5).....	33
Table 16: Pre test Response: (Q19).....	34
Table 17: Post test Response: (Q19).....	34
Table 18: Pre test Response: (Q20).....	35
Table 19: Post test Response: (Q20).....	35

Table 20: Pre test Response: (Q7).....36

Table 21: Post test Response: (Q7).....36

Table 22: Pre test Response: (Q13).....37

Table 23: Post test Response: (Q13).....37



## Glossary

**AIDS**= Acquired Immune Deficiency Syndrome.

**HIV**= Human Immunodeficiency Virus.

**Risk Behaviors**= Sexual behaviors that put an individual at risk for contracting

HIV and AIDS.

**Safer Sex**= Sexual activity that carries little or no risk for contracting or passing on HIV.

## Chapter I Introduction

Human Immunodeficiency Virus (HIV) was first identified in the United States during the early 1980s, when homosexual men started to become ill with a rare type of cancer. Through research however scientists learned more about HIV and how to prevent infection. HIV is Lentivirus, a classification of viruses that are characterized by a long incubation period and obtain the ability to replicate DNA. The virus attacks your immune system and gradually destroys it, by attaching itself to CD4 cells (white blood cells which are vital to a healthy immune system) incorporating viral DNA into the host cell which allows for replication (Center for Disease Control and Prevention (CDC), 2007). Healthy CD4 count ranges from 500 to 1,800 per cubic millimeter of blood. HIV is the virus that cause Acquired Immunodeficiency Syndrome, AIDS. AIDS is classified as having a CD4 count of 200 or below. Transmission of HIV occurs through the bloodstream by contact of infected body fluids. These include blood, semen, vaginal fluids and breast milk. The infection can be transmitted by having unprotected vaginal, oral or anal sex, sharing needles as in illegal drug use, or by direct contact of infected blood such as with a transfusion, or accidental injury. Infected mothers can also pass on the virus to their child during birth or through breast feeding (CDC, 2007).

There are several stages of HIV, they are: infection/response, asymptomatic stage, symptomatic HIV infection and progression from HIV to AIDS. During the infection period HIV first attaches itself to your immune system and begins to copy itself. During this time you may experience flu like systems. The response period is when your body reacts to the infection and tries to destroy the virus. This is called seroconversion,

when your body will go from HIV negative to HIV positive. Next is the asymptomatic stage, here your body shows no symptoms of having HIV. This can last from one month to a period of ten years. Following the asymptomatic stage is the symptomatic stage. It is during this stage your body will begin to develop infections. The last stage, development of AIDS, occurs when your immune system becomes too weak to fight off infections and your CD4 cell count has dropped below 200 (CDC, 2007).

The purpose of this project is to determine the effectiveness of an HIV prevention program among women age 50 and older. Worldwide there are 33.2 million infected persons living with HIV. The World Health Organization (WHO) reported that there are around 6800 people who become infected with HIV everyday. Furthermore they found that over 5700 people die each day due to inadequate HIV prevention and treatment (World Health Organization (WHO), 2007). Of these statistics women constitute almost 60% of all AIDS cases today (Women of Steel, 2007).

In the United States it is believed that there are over 1.2 million people with HIV/AIDS (Kaiser Family Foundation, 2007). In Michigan the number of people infected with HIV is rising. There are over eleven thousand Michigan residents living with HIV. The Michigan Department of Community Health reports that the number of HIV/AIDS cases among women over forty is increasing (Michigan in Brief, 2006) and according to the Center of Disease Control and Prevention, AIDS cases for women over fifty have increased 22% since 1991. Women over fifty account for nearly 14% of all individuals living with HIV (Benet, 2001).

What makes older people at risk for HIV? One answer may be that seniors are becoming more active in the dating scene but are not educated on HIV prevention.

Online dating services have provided seniors with a safe environment to meet singles. According to Match.com the number of older individuals using online dating has increased by 350 % since the year 2000 (Scharper, 2006). The once old belief that senior citizens are not sexually active has been proven false as recent studies show that older women are sexually active and out number older men, making men a “hot commodity” (Schaper, 2006, p2).

However, many of these women have gone through menopause and don’t think about using condoms, as they are no longer able to become pregnant. Furthermore older women suffer from vaginal dryness. As the vaginal walls become thinner they can tear more easily during intercourse, making a prefect opening for HIV infected semen to enter, thus increasing the risk of contracting HIV (Fowler, 2005).

#### Purpose of the Study

The purpose of this study is to determine how effective an HIV prevention program is at changing behaviors, knowledge and skills among women age 50 and older, living in Lapeer and Genesee County.

#### Research Question

What impact will an HIV/AIDS prevention program have on the following outcomes: knowledge regarding HIV transmission & risks, self-efficacy regarding condom use, safer sex knowledge and communication skills, among women age fifty and older living in Lapeer and Genesee County?

#### Significance of the Study

The significance of this study is that HIV prevention programs are normally targeted at younger people, leaving older women less informed regarding HIV

transmission and prevention, despite the evidence of the increasing impact of HIV on older women.

As the baby boomer generation ages it is expected that the number of HIV/AIDS cases will rise. Throughout the world nearly 80% of women newly infected with HIV are married or in a long term relationship. Studies conducted on HIV and AIDS clearly show that HIV prevention programs work (Neundorfer, 2005). Despite the fact that older women are more vulnerable to HIV due to physiological changes, medical professionals fail to educate or address issues of HIV prevention in this population (Ullrich, 2004).

## Chapter II

### Literature Review

Programs designed in the past set priorities in HIV prevention aimed at high risk populations, such as men who engage in sexual relations with other men. According to Catania and colleague, men who had sex with men accounted for 46% of U.S. AIDS cases and received 28% of funding for risk reduction whereas heterosexual cases accounted for 31% and received 17% of funding (Catania, 2000).

With the alarming rate of HIV/AIDS cases in Africa more funding has been aimed at prevention of HIV in this area. President Bush signed a Global AIDS Bill which allocated 15 Billion dollars over a five year period to fight the spread of AIDS in Africa and the Caribbean (Beyond AIDS, 2003). “Real Man, Real Woman” is an example of one such program designed at addressing the rise of HIV/AIDS in Africa. Although the program addresses issues regarding trans-generational sex, sex for favors and sexual coercion, the program is targeted at youth and their perceptions of risk regarding contracting HIV (US Fed News, 2007).

Recent studies indicate a need for an HIV program designed specifically for older women. According to research conducted by the National Institute of Allergy and Infectious Diseases (NIAID) women have a greater risk of becoming infected with HIV during unprotected heterosexual intercourse compared to men who have unprotected heterosexual intercourse. The NIAID findings state that more than 90% of all adolescent and adult HIV infections are a result of heterosexual intercourse. Risk factors that contributed to HIV transmission among heterosexual women were inconsistent and incorrect condom usage among individuals where one partner was HIV positive,

contaminated syringes for illegal drug use, unknown and/or high risk behaviors of sex partners and non consensual sex (NIAID, 2006).

### Race and Safer Sex

Studies have found that race may be an indicator for behavior change and attitudes regarding safer sex practices. A community-wide survey of fifty five women aged 58-93 was conducted by Lindau M.D. et al (2006), examined the effects of race and marriage on the sexual attitudes, behaviors and patient-physician communication regarding HIV/AIDS and sexuality. The study showed that nearly 57% of the women surveyed were sexually active since their 60<sup>th</sup> birthday. Of these sexually active women, nearly 60% of them reported that they did not use condoms and 21% of these women believed that condom usage was not necessary since they could not get pregnant. The study also found that African American women were more likely to make changes in sexual behavior (e.g. condom usage), due to HIV infection, compared to white women (53% vs. 19%). Furthermore, married and African American women were also more likely to discuss sex with their physician than white women (80% vs. 47%), (Lindau, 2006).

### Inconsistent Condom Use

Practicing safer sex has shown to be effective in preventing HIV infection however studies show a large number of older women do not use condoms consistently. A study conducted by Paranjape, M.D. et al (2006), states that few older women however, even when living in areas with high HIV incidence, practice safer sex. Trust in partner, along with knowledge of condom efficacy and dependence of condoms by sex partner, were independently associated with higher odds of safe sex, indicating the need

for HIV programs for this age group. The study took place over a 13-month period in two large inner city metropolitan areas with high HIV/AIDS prevalence and was conducted to measure safe sex practices among women aged  $\geq 50$  (Paranjape, 2006).

Results of the study showed that 81% of participants reported that they were sexually active. Of these only 13% reported using condoms frequently and only 39 of the women in the survey with a partner reported practicing safer sex. Safer sex was defined in the study as abstinence or frequent condom usage. According to the findings only 7 of these 39 women knew that condoms were effective in preventing the transmission of HIV. Only 19 of the 109 remaining women who did not report practicing safer sex were aware that condoms were effective in preventing the transmission of HIV (Paranjape, 2006).

#### HIV Knowledge

Lack of knowledge regarding HIV prevention among older women was identified as a risk factor in a study conducted by Neundorfer, PhD, RN, et al (2005). They conducted a qualitative study that consisted of in-depth interviews with 24 HIV positive women aged 41-75 years, regarding their exposure to HIV. The purpose of the study was to determine risk factors for HIV, in an effort to improve HIV-prevention for women of this age group. Among the risks identified were: a lack of HIV prevention information, HIV risk taking behavior for sake of relationship, drug and alcohol use, and lack of information regarding partner's sexual history. A startling 67% of the women surveyed reported that they did not know their partner's sexual history and 38% of the women surveyed showed a lack in knowledge regarding HIV (Neundofer, 2005).



Other studies have shown similar results when it comes to older people and knowledge about HIV/AIDS. The National Institute on Aging (NIA) found that older individuals are not as informed about how HIV is spread or the early symptoms of HIV compared to younger people and often will mistake the first signs of HIV as natural signs of aging (NIA, 2004).

### Communication

Communication is vital in combating HIV infection yet partners are not discussing their sexual history or letting their partner know if they are HIV positive. A study by D. Hollander found that two out of ten heterosexual men and women diagnosed HIV positive were engaging in sex without disclosing their HIV status to their partner (Hollander, 2003).

Siobhan Benet, *HIV/AIDS in Mature Women Jumps 40 Percent* (2001), reports that AIDS cases in women 50 and over are rising twice as fast compared to women aged 13 to 49. Contributing factors for the rise was found to be unprotected sex and lack of negotiation skills. Benet found that older women were uncomfortable discussing safer sex with their partner(s) and contributed this to a lack of change in gender roles among this age group (Benet, 2001).

Older women are not talking only uncomfortable in talking about safer sex or HIV prevention with their partner but with their doctor as well. Women aren't the only ones however not asking questions. A study conducted by doctors in Texas found that most doctors never ask patients over 50 questions about HIV/AIDS prevention and often mistake the symptoms of HIV/AIDS to those associated with natural aging. The article contributed risk factors for this age group to lack of safer sex messages to older women

and ageism (Benet, 2001). Lindau and colleagues found similar results regarding lack of communication. They discovered that although older women were sexually active and engaged in risky behaviors, they believed it to be the physician's job to initiate conversations regarding sex (Lindau, 2006).

### Existing Programs

Programs designed in the past set high priorities in HIV prevention and were aimed at what was perceived to be the highest risk population, men who engage in sexual relations with other men. According to Catania et al. in 1999, men who had sex with men accounted for 46% of U.S. AIDS cases and received 28% of the funding for risk reduction, whereas heterosexual cases accounted for 31% and received 17% of the funding (Catania, 2000).

With the alarming rate of HIV/AIDS cases in Africa, more funding has been aimed at prevention of HIV in this area. President Bush signed a Global AIDS Bill which allocated 15 Billion dollars over a five year period to fight the spread of AIDS in Africa and the Caribbean (Beyond AIDS, 2003). "Real Man, Real Woman" is an example of one such program designed at addressing the rise of HIV/AIDS in Africa. Although the program addresses issues regarding trans-generational sex, sex for favors and sexual coercion, the program is targeted at youths and their perceptions of risk regarding contracting HIV (US Fed News, 2007).

### Gaps in Literature

Historically programs aimed at HIV education have been focused on homosexual men (AIDS Weekly, 2007). Although research is limited on women over the age of 50, studies completed clearly state that the rate of infection is rising. The need for an

HIV/AIDS program especially designed to increase knowledge and awareness of HIV/AIDS, increase communication regarding safer sex and increase self efficacy regarding condom use is evident. However there are no health education programs targeting HIV/AIDS prevention for this age group.

### Theories

The Health Belief Model (HBM) was originally developed by a group of social scientists in the 1950s to address the widespread failure of people to participate in preventive programs. The program is a value expectancy theory which places the importance or value of the individuals desire to avoid illness. Key concepts of the Health Belief Model are perceived susceptibility, perceived severity, perceived benefits, cues to action and self-efficacy (Janz, 2002). Supporting evidence using Health Belief Model in HIV/AIDS prevention indicates that perceived susceptibility is necessary especially for individuals who are engaged in high risk behaviors in order to establish commitment to change (Janz, 2002). “In a study of over four hundred young men and women, Steers and others (1996) found that perceived susceptibility to HIV/AIDS was associated with behavioral changes, including increased condom use, fewer sex partners, and a decreased number of sexual encounters” (Janz, 2002, p56).

Incorporating the HBM into an HIV intervention will increase older women’s awareness regarding their susceptibility to HIV by providing information relevant to risk behaviors among this age group. Perceived severity will address the seriousness of HIV, the high incident rate in Michigan and the need for prevention. Self-efficacy will be enhanced through the use of demonstration and practice application along with a guided discussion to increase communication skills.

The theory of Gender and Power examines social structures that have characterized gender relationships between men and women throughout history. The concept which was first expressed by Charlotte Perkins Gilman in 1911 defines woman in relationship to other men, not herself. The theory examines the sexual division of labor, power and the structure of the cathexis or social “norms”, which have contributed to the characterization of women as subordinate to men. According to the theory this has not only limited women by assigning them a social path, but a career path as well, which in turn has limited their economic potential. In turn this inequality has placed women at a higher risk for health related outcomes and health exposures (Wingood, 2000).

Incorporating the theory of gender and power into an intervention will provide women with a framework for developing social skills when it comes managing HIV risk reduction behaviors such negotiation and communication skills when it comes to condom use. Issues addressed include dispelling traditional beliefs regarding women’s role in sexual relationships, increasing self efficacy regarding gender and enhancing communication skills emphasizing partner’s role in reducing HIV risks. A discussion will reinforce key elements of the Theory of Gender and Power to ensure success regarding condom use and provide skills to improve communication with partner regarding condom use and risk reduction of HIV.

### Chapter III Methodology and Design

#### Subjects/Recruitment

Single women age 50 and older who reside at Lockwood senior living center located in Davison Michigan and Riverview senior living center in Lapeer Michigan were recruited to participate in a 90 minute educational session. Eligibility criteria for the study include: sexually active, age 50 and older and single.

Flyers (Appendix 1) were posted at both senior living centers and provided information about the workshop. Information included in the flyer was criteria for inclusion in the workshop and a contact number for more information regarding day and time of the workshop.

The study consisted of forty (n=40) women identified based on inclusion criteria, (single, sexually active, and age 50 and older). The sample population was obtained after seeking approval from human subjects institutional review board at the University of Michigan-Flint. Participation in the study was noted as voluntary.

#### Procedures

The workshop started with a brief introduction (Activity 1). Participants were read the Informed Consent (Appendix 3) and were informed about confidentiality of the study and of their rights to withdraw from the study at any time (Activity 2). Participants did not receive any incentive for participating in the study but perceived benefits from the study included obtaining knowledge about HIV/AIDS. No foreseeable risks were identified by participating in the study other than potential discomfort in discussing sex. Participants were asked to complete a 20 item self-administered pre-test (Appendix 4) which was used to provide baseline measures. Following pre-test participants received

an HIV educational packet (Activity 3, Appendix 5). The student researcher read the packet as participants followed along. A Power Point slide presentation was used in conjunction with the educational packet. Discussion of HIV education followed, allowing participants to ask questions regarding information presented. Participants were then given a 5-10 min. break. Following the break participants were placed into groups at which time they received instructions on correct condom application (Activity 5) and were given condoms and prophylactic phallus to practice condom application. Next communication skills were reinforced using the guided discussion. After a 5 min. break a 20 item self-administered post-test (Activity 6, Appendix 6) was administered to ascertain the level of change. Closure of the workshop, (Activity 7), included thanking participants for their involvement in the study and an explanation of what would be done with the obtained information.

#### Data Collection

The pre and post tests were collected at the time of the workshop and contained questions regarding HIV knowledge, self efficacy regarding condom use, safer sex practice and communication. Demographics collected included age, race and educational level. These were used to determine if a correlation between age, race and education in regards to HIV knowledge, safer sex practice, self efficacy regarding condom use and communication.

#### Research Design

The research design utilized for this study was a one group pre test-post test non-experimental design. This approach is used to measure participant's knowledge before and after an educational program. Percent of level of change was determined by

comparison of baseline scores taken at pre-test and compared to scores obtained at post-test.

### Program Objectives

- Objectives of the program are to increase knowledge regarding HIV transmission, risk factors and symptoms.
- Increase self-efficacy regarding condom use.
- Increase communication regarding safer sex practice.
- Decrease risk behaviors associated with HIV, among women over fifty years old, living in Genesee County.

### Statistical Analyses

Variables accessed in this study were identified to determine if a relationship exist between age, education and HIV knowledge. Correlation between educational level and age were also examined in regards to self efficacy and condom use, safer sex practice and communication. Data analysis were conducted using SPSS 17.0 (Statistical Package for the Social Sciences) to determine participants knowledge regarding HIV/AIDS. The statistics used were a Paired Sample T-test to measure differences pre and post workshop. A Pearson's correlation coefficient was used to reveal if any association exist between variables: age and education. Baseline measures were taken in the form of a 20 item self administered pre-test. Scores were examined following the HIV prevention workshop. A 20 item self administered post-test determined the percentage of change in HIV knowledge, self efficacy regarding condom use, safer sex practice and communication.

## Chapter IV Results

The workshop was implemented on three separate occasions. Data obtained from the workshops were combined as workshops individual results were not the intent of this study. Age, race and education level were collected to determine if a correlation existed between HIV knowledge, safer sex knowledge, communication skills and self efficacy regarding condom use. Participants consisted of 40 women (N=40) and ages ranged from 50 to 71 years and older. According to the data collected 35% (n=14) of the women ranged from 66 years to 70 years of age. The next highest age group were women aged 71 years and older, as 32.5% (n=13) of the women accounted for this age group. Women between the ages of 61-65 accounted for 27.5% (n=11) of the participants. The lowest age group at just 5% (n=2) were women between 56-60 years old. Table 1 outlines demographics for participants according to age.

**Table 1: Frequency table for participants according to age**

<b>Age group</b>	<b>#of participants</b>	<b>Percentage</b>
<b>56-60</b>	<b>2</b>	<b>5%</b>
<b>61-65</b>	<b>11</b>	<b>27.5%</b>
<b>66-70</b>	<b>14</b>	<b>35%</b>
<b>71 and older</b>	<b>13</b>	<b>32.5%</b>
<b>Total</b>	<b>40</b>	<b>100%</b>

The results for education indicated that 5% (n=2) of the participants were college graduates. The majority of the participants, 57.5% (n=23), were High School graduates while 12.5% (n=5) had some High School education but did not graduate. 17.5% (n=2) of the participants reported that they had some college and the remaining 5% (n=2)



reported having an 8<sup>th</sup> grade education or below. Results are based upon thirty nine participants as one participant did not answer this question. Table 2 outlines frequency for participants according to education.

**Table 2: Frequency table for participants according to education**

<b>Education level</b>	<b>#of participants</b>	<b>Percentage</b>
<b>8<sup>th</sup> grade and below</b>	<b>2</b>	<b>5%</b>
<b>Some high school</b>	<b>5</b>	<b>12.5%</b>
<b>High school graduate</b>	<b>23</b>	<b>57.5%</b>
<b>Some college</b>	<b>7</b>	<b>17.5%</b>
<b>College graduate</b>	<b>2</b>	<b>5%</b>
<b>Total</b>	<b>39</b>	<b>97.5%</b>

Results for race indicated that the study was comprised mainly of Caucasian women, as 80% (n=32) of participants reported in this category. African American women consisted of 5% (n=2) of the participants, while Hispanic women made up only 2.5% (n=1) of the participants. A surprising 12.5% (n=5) of the participants reported that they were Native American; further investigation found that during the first workshop the participants thought Native Americans were people born in America. Clarification was made for future workshops. Table 3 outlines frequency of participants according to race.

**Table 3: Frequency table for participants according to race**

<b>Race</b>	<b>#of participants</b>	<b>Percentage</b>
<b>African American</b>	<b>2</b>	<b>5%</b>
<b>Hispanic</b>	<b>1</b>	<b>2.5%</b>
<b>Native American</b>	<b>5</b>	<b>12.5%</b>
<b>European American (White)</b>	<b>32</b>	<b>80%</b>
<b>Total</b>	<b>40</b>	<b>100%</b>

A 20 item self reporting pre and post test was used to measure the objectives of the workshop. Questions on the pre and post test were identical except for the first three demographic questions on the pre test. The survey was conducted under the approval of the University of Michigan- Flint Institutional Review Board. Questions were made up based solely on the knowledge of the researcher. This knowledge was obtained through readings and an internship at YOUR center in Flint, MI. A Cronbach's Alpha, using SPSS 17.0 statistical package, was used to determine the reliability of the questions. Results showed an overall reliability of .764.

A Pearson's Correlation was used to determine the relationship between age, race, and education regarding HIV knowledge, self efficacy regarding condom use, communication skills and safer sex knowledge. Results indicated that there was no correlation between these variables and how one scored on the survey.

#### HIV knowledge

HIV knowledge was measured using a Likert scale in the form of a pre and post test 20 item self administered questionnaire. Questions were assigned a point value with a point of 1 representing correct and a 0 representing not correct. Questions regarding HIV addressed knowledge, transmission, risks, and symptoms. In total 9 questions were used to determine overall HIV knowledge. An overall average score of 72% was obtained for the pre test compared to a 95% for the post test.

Although the overall score was moderate there appears to be a lack of knowledge in certain topics in HIV knowledge. According to the data collected on the pre and post test HIV transmission was one area where participants score reflected a lack of knowledge. When asked (Q3), **"Can HIV be transmitted by having oral sex?"** only

four (10%) women age 71 and older had the correct response. Women age 61-65 however had the highest number correct responses to this question, as eleven (27.5%) women responded correctly. Post test responses indicated a substantial increase in knowledge regarding HIV transmission as women over 71 obtained the highest overall correct response, (32.5%; n=13) for this question. Participant results are outlined in Tables 4 and 5.

**Table 4: Pre test Response: (Q3) “Can HIV be transmitted by having oral sex?”**

Age Participants	Correct	Not Correct	Total # of
56-60	1	1	2
61-65	7	4	11
66-70	11	3	14
71 and older	4	8	12
<b>Total</b>	<b>23</b>	<b>16</b>	<b>39</b>

**Table 5: Post test Response: (Q3) “Can HIV be transmitted by having oral sex?”**

Age Participants	Correct	Not Correct	Total # of
56-60	2	0	2
61-65	10	1	11
66-70	12	2	14
71 and older	13	0	13
<b>Total</b>	<b>37</b>	<b>3</b>	<b>40</b>

Women age 71 and older continued to show a consistency in lack of knowledge regarding HIV transmission as none of the women responded correctly when asked the following (Q11), “HIV is transmitted through? (check all that apply): Blood, semen, saliva, and vaginal fluids.” Similar in their responses were women age 66-70 as only two (5%) of the participants responded correctly. One participant did not answer this

question on the pre test. Once again women over 71 showed a substantial increase in the number of correct responses on the post test as eleven (27.5%) women answered correctly. Similar were women age 66-70 as they increased from 5% (n=2) to 30% (n=12) in response to this question. Result of participant response is outlined in Table 6 and 7.

**Table 6: Pre test Response: (Q11) “HIV is transmitted though (check all that apply)...”**

Age Participants	Correct	Not Correct	Total # of
56-60	1	1	2
61-65	1	10	11
66-70	2	12	14
71 and older	0	12	12
Total	4	35	39

**Table 7: Post test Response: (Q11) “HIV is transmitted though (check all that apply)...”**

Age Participants	Correct	Not Correct	Total # of
56-60	1	1	2
61-65	9	2	11
66-70	12	2	14
71 and older	11	2	13
Total	33	7	40

Signs and symptoms of HIV/AIDS was another area where participants showed a lack of knowledge. When asked true or false (Q12), “**Flu like symptoms can be a sign of HIV?**” women age 71 and older had the highest number of incorrect responses (20%; n=8). Women age 66-70 responded with seven (17.5%) incorrect responses. The highest

number of correct responses for this question where from women age 61-65 as they accounted for nine (22%) correct responses. Two participants did not answer this question on the pre test. See Table 8 for participant results of pre test.

**Table 8: Pre test Response: (Q12) “Flu like symptoms can be a sign of HIV?”**

Age Participants	Correct	Not Correct	Total # of
56-60	2	0	2
61-65	9	1	11
66-70	7	7	14
71 and older	4	8	12
Total	22	16	38

A substantial increase was observed regarding knowledge of HIV signs and symptoms as there was an increase from seven (17%) correct responses on pre test for women age 66-70 to fourteen (35%) correct responses on post test for (Q12), “**Flu like symptoms can be a sign of HIV?**” Women 71 and older also obtained an increase for this question, from four (10%) correct responses on the pre test compared to thirteen (32.5%) correct at post test. There were no missing responses from participants on the post test for these questions. Participant results for post test are outlined in Table 9.

**Table 9: Post test Response: (Q12) “Flu like symptoms can be a sign of HIV?”**

Age Participants	Correct	Not Correct	Total # of
56-60	2	0	2
61-65	11	0	11
66-70	14	0	14
71 and older	13	0	13
Total	40	0	40

### Safer Sex Knowledge

Safer sex knowledge was measured using five questions. Four questions were assigned a point value of 1 for correct and 0 for incorrect. One question asked participants to answer the question by their value of importance. “Very important” received a point value of 2, “somewhat important” received a point value of 1 and “not at all important” received a point value of 0. Participants overall percentage for pre test was 68% compared to 90% for post test.

When asked (Q6), “**How important do you feel it is to use a condom every time you have sex?**” women age 71 and older accounted for the lowest number of correct responses as eight (20%) women felt it was “not at all important” to use condoms. Three (7.5%) women indicated that it was “somewhat important” and only two (5%) of women felt it was “very important”. One participant did not answer this question at the pre test level. Scores increased on the post test as six (15%) women responded that it was “very important” and only one (2%) responded that it was “not at all important.” “Somewhat important” responses doubled from three (7.5%) at pre test to six (15%) at post test.

Result for participant response is outlined in Table 10 and 11.

**Table 10: Pre test Response: (Q6) “How important do you feel it is to use a condom every time you have sex?”**

Age	Not at all	Somewhat	Very	Total # of Participants
56-60	0	1	1	2
61-65	3	6	2	11
66-70	4	4	5	13
71 and older	8	3	2	13
<b>Total</b>	<b>15</b>	<b>14</b>	<b>10</b>	<b>39</b>

**Table 11: Post test Response: (Q6) “How important do you feel it is to use a condom every time you have sex?”**

Age	Not at all	Somewhat	Very	Total # of Participants
56-60	0	1	1	2
61-65	0	8	3	11
66-70	1	3	10	14
71 and older	1	6	6	13
Total	2	18	20	40

Similar results were found when participants were asked (Q18), “Before using a condom it is important to check?” (check all that applies): The color, the expiration date, the brand name.” Women age 71 and older had the lowest number of correct responses as only four (10%) responded correctly. Women age 61-65 had the highest number of correct response as nine (22.5%) of the women answered this question correctly. Three (7.5%) of the participants did not answer this question on the pre test. Responses improved on the post test as only one (2.5%) participant age 71 and older responded incorrectly compared to seven (17.5%) participants on the pre test. Women age 61-65 had an increase from nine (22.5%) correct responses on the pre test to fourteen (35%) correct responses on the post test. All of the participants answered the question on the post test. Results of participant response are outlined on Table 12 and 13.

**Table 12: Pre test Response: (Q18) “Before using a condom it is important to check (check all that applies)?”**

Age	Correct	Not Correct	Total # of Participants
56-60	2	0	1
61-65	9	2	2
66-70	6	7	5
71 and older	4	7	2
Total	21	16	37

**Table 13: Post test Response: (Q18) “Before using a condom it is important to check (check all that applies)?”**

<b>Age Participants</b>	<b>Correct</b>	<b>Not Correct</b>	<b>Total # of</b>
<b>56-60</b>	<b>2</b>	<b>0</b>	<b>2</b>
<b>61-65</b>	<b>10</b>	<b>1</b>	<b>11</b>
<b>66-70</b>	<b>14</b>	<b>0</b>	<b>14</b>
<b>71 and older</b>	<b>12</b>	<b>1</b>	<b>13</b>
<b>Total</b>	<b>38</b>	<b>2</b>	<b>240</b>

### Communication

Communication regarding safer sex knowledge was measured and identified by using four questions. Three questions were assigned a point value of 1 for correct and 0 for not correct. One question asked participants their level of confidence when communicating with partner regarding condom use. This question was assigned a point value of 2 for “very confident”, 1 for “somewhat confident” and 0 for “not at all confident.” Participants had an overall percentage of 40% for the pre test compared to 55% for the post test.

When asked (Q5), “**How confident do you feel in discussing condom use with your partner?**” seven (17.5%) women age 66-70 responded “not at all confident.” “Somewhat confident” received the next highest number of responses as six (15%) women age 71 and older responded in this category. Results improved for the post test as only two (5%) women age 66-70 responded that they were “not at all confident.” Response for women age 71 and older had an increase of only one, as seven (17.5%) of the participants responded as “somewhat confident.” Two participants failed to answer



this question on the pre test and one participant did not answer on the post test.

Participant results are outlined in Table 14 and 15.

**Table 14: Pre test Response: (Q5) “How confident do you feel in discussing condom use with your partner?”**

Age	Not at all	Somewhat	Very	Total # of Participants
56-60	0	0	2	2
61-65	3	6	1	10
66-70	7	4	2	13
71 and older	5	6	2	13
<b>Total</b>	<b>15</b>	<b>16</b>	<b>7</b>	<b>38</b>

**Table 15: Post test Response: (Q5) “How confident do you feel in discussing condom use with your partner?”**

Age	Not at all	Somewhat	Very	Total # of Participants
56-60	1	0	1	2
61-65	2	6	2	10
66-70	2	9	3	14
71 and older	3	7	3	13
<b>Total</b>	<b>8</b>	<b>22</b>	<b>9</b>	<b>39</b>

Question nineteen (Q19) showed only a slight increase in response from pre to post test. When asked, “**I can talk to my doctor about safer sex practices?**” This question had a “yes” or “no” option for response. Women age 66-70 accounted for eight (20%) “yes” responses. This only increased by one, as nine (22.5%) participants answered “yes” on the post test. Women age 71 and older showed an increase for this question as four (10%) participants answered “no” on the pre test compared to nine

(22.5%) “yes” responses on the post test. Two participants did not answer this question on the pre test. Results for participant response are outlined on Table 16 and 17.

**Table 16: Pre test Response: (Q19) “I can talk to my doctor about safer sex practices?”**

Age	No	Yes	Total # of Participants
56-60	1	1	2
61-65	6	5	11
66-70	8	5	13
71 and older	4	8	12
Total	19	19	38

**Table 17: Post test Response: (Q5) “How confident do you feel in discussing condom use with your partner?”**

Age	No	Yes	Total # of Participants
56-60	1	1	2
61-65	3	8	11
66-70	3	11	14
71 and older	3	10	13
Total	10	30	40

A moderate change was observed for Question twenty (Q20), “I can talk to my partner about my sexual history?” from women age 66-70 as these participants showed a decrease in the number of correct responses from pre to post test. Seven (17.5%) women age 66-70 answered “no” for this question on the pre test compared to ten (25%) on the post test. Three participants failed to answer this question on the pre test which may account for the higher number of incorrect responses on the post test. For participants responses see Tables 18 and 19.

**Table 18: Pre test Response: (Q20) “I can talk to my partner about my sexual history?”**

<b>Age</b>	<b>No</b>	<b>Yes</b>	<b>Total # of Participants</b>
<b>56-60</b>	<b>1</b>	<b>1</b>	<b>2</b>
<b>61-65</b>	<b>7</b>	<b>4</b>	<b>11</b>
<b>66-70</b>	<b>7</b>	<b>5</b>	<b>12</b>
<b>71 and older</b>	<b>8</b>	<b>4</b>	<b>12</b>
<b>Total</b>	<b>23</b>	<b>14</b>	<b>37</b>

**Table 19: Post test Response: (Q20) “I can talk to my partner about my sexual history?”**

<b>Age</b>	<b>No</b>	<b>Yes</b>	<b>Total # of Participants</b>
<b>56-60</b>	<b>1</b>	<b>1</b>	<b>2</b>
<b>61-65</b>	<b>7</b>	<b>4</b>	<b>11</b>
<b>66-70</b>	<b>10</b>	<b>4</b>	<b>14</b>
<b>71 and older</b>	<b>7</b>	<b>6</b>	<b>13</b>
<b>Total</b>	<b>25</b>	<b>15</b>	<b>40</b>

**Self Efficacy**

Self efficacy regarding condoms was measured using only two questions. The pre test overall average was 32% compared to 51% at post test. Participants were asked about their confidence regarding condom use and a point value of 2 was given for “very confident”, 1 for “somewhat confident” and a 0 for “not at all confident.” When asked (Q7), “**How confident are you that you will use a condom consistently with your partner?**” nine (22.5%) women age 71 and older said they were “not at all confident” this number decreased to four (10%) on the post test. Six (15%) women age 66-70 said

they were “somewhat confident” on the pre test. This number increased to nine (22.5%) on the post test. Four participants did not answer this question on the pre test and two did not answer on the post test. Table 20 and 21 outline participants’ response on pre and post test.

**Table 20: Pre test Response: (Q7) “How confident are you that you will use a condom consistently with your partner?”**

Age	Not at all	Somewhat	Very	Total # of Participants
56-60	0	1	1	2
61-65	4	5	1	10
66-70	3	6	3	12
71 and older	9	2	1	12
Total	16	14	6	36

**Table 21: Post test Response: (Q7) “How confident are you that you will use a condom consistently with your partner?”**

Age	Not at all	Somewhat	Very	Total # of Participants
56-60	1	1	0	2
61-65	1	8	0	9
66-70	2	9	3	14
71 and older	4	5	4	13
Total	8	23	7	38

When asked (Q13), “I am confident in my ability to put on a condom correctly?” women age 71 and older accounted for nine (22.5%) responses of “not at all” and three (7.5%) responses for “somewhat confident”. None of the women in this age

group responded “very confident”. Six (15%) women age 61-65 responded they were “not at all confident”, five (12.5%) responded that they were “somewhat confident” and none responded “very confident”. Post test responses showed improvement as four (10%) women age 71 and older responded that they were “very confident” and none responded that they were “not at all confident”. Women age 61-65 also showed an improvement as only two (5%) answered “not at all confident” on the post test compared to six (15%) on the pre test. Two participants did not answer this question on the pre test. Results are outlined on Table 22 and 23.

**Table 22: Pre test Response: (Q13) “I am confident in my ability to put on a condom correctly?”**

<b>Age</b>	<b>Not at all</b>	<b>Somewhat</b>	<b>Very</b>	<b>Total # of Participants</b>
<b>56-60</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>
<b>61-65</b>	<b>6</b>	<b>5</b>	<b>0</b>	<b>11</b>
<b>66-70</b>	<b>4</b>	<b>7</b>	<b>2</b>	<b>13</b>
<b>71 and older</b>	<b>9</b>	<b>3</b>	<b>0</b>	<b>12</b>
<b>Total</b>	<b>19</b>	<b>16</b>	<b>3</b>	<b>38</b>

**Table 23: Post test Response: (Q13) “I am confident in my ability to put on a condom correctly?”**

<b>Age</b>	<b>Not at all</b>	<b>Somewhat</b>	<b>Very</b>	<b>Total # of Participants</b>
<b>56-60</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>
<b>61-65</b>	<b>2</b>	<b>8</b>	<b>1</b>	<b>11</b>
<b>66-70</b>	<b>0</b>	<b>12</b>	<b>2</b>	<b>14</b>
<b>71 and older</b>	<b>0</b>	<b>9</b>	<b>4</b>	<b>13</b>
<b>Total</b>	<b>2</b>	<b>31</b>	<b>7</b>	<b>40</b>

## Chapter V

### Discussion and Conclusion

The workshop was designed to promote participants involvement throughout the presentation, including discussion of HIV knowledge, self efficacy regarding condom use, safer sex practices and communication regarding safer sex. Theories incorporated in this workshop included the Health Belief Model and the Theory of Gender and Power. Studies have shown the Health Belief Model to be effective in HIV education as it addresses perceived susceptibility which is a key concept for behavior change (Janz, 2002). The Health Belief Model was used to increase participants' awareness regarding their susceptibility to HIV/AIDS by providing them with knowledge regarding HIV risk factors. Perceived severity addressed the seriousness of HIV by providing education regarding the high rate of HIV in Michigan. Self efficacy regarding safer sex knowledge and condom use was addressed through discussion on condom use, and through a condom application activity. The Theory of Gender and Power was chosen to address societal ideas or "norms" regarding women and their role in the family, community and as a sex partner. Development of social skills, communication and negotiation, enhanced self efficacy regarding safer sex and allows participants to manage risk factors associated with HIV/AIDS.

Although this study showed no correlation between age, race and education in regards to HIV knowledge, safer sex practices, self efficacy regarding condom use or communication skills, the result of this workshop had similar findings according to literature review. Supporting research suggest that older women are less informed about HIV and this proved to be the case with this study. Age proved to be a constant variable

regarding HIV knowledge as women 71 and older scored the lowest regarding HIV symptoms.

HIV transmission was one area where participants' showed a lack of knowledge. HIV was not introduced into the general public until the 1980s as a homosexual or drug addicts' disease. Traditionally women married and raised a family. Marriage was considered a lifelong commitment therefore these women may have felt no need to inform themselves about HIV as they did not feel at risk. As society roles shifted, women becoming bread winners and divorce more common, these older women still felt no risk as they were now heading towards their golden years and unable to become pregnant. By viewing condoms as a form of birth control only, older women did not obtain the skills necessary for managing HIV risk factors.

Concepts from the Health Belief Model were used to address perceived susceptibility and severity of HIV and increase self efficacy regarding condom use. The Theory of Gender and Power addressed society norms that viewed women as mothers, care takers and homemakers. Men were seen as the bread winner and head of the household, responsible for making the majority of the decisions regarding the household and the relationship in the bedroom. This inequality placed women at a higher risk for health exposures (Wingood, 2000). These issues were addressed during the educational component and discussion regarding HIV transmission, risk factors and symptoms. Many of the participants stated that they felt sharing a drink or kissing was one way to contract HIV. This was reflected on question 11 (Q11) where participants were asked, "HIV is transmitted through (check all that apply), Blood, semen, saliva and vaginal fluids." Women age 71 and older had zero correct responses. Discussion of exposure

and facts regarding transmission provided them with knowledge however a few of the participants expressed that the evidence was not strong enough to change their old beliefs regarding HIV and saliva. This was reflected on the post test as seven (17.5%) of the participants answered this question incorrectly.

During a discussion on HIV transmission and oral sex, several of the women stated that oral sex was not something they would not engage in. It was evident to the health educator that this topic was a sensitive area for discussion as many of the participants did not want to discuss this topic in depth. This was addressed using the Theory of Gender and Power and the perceived concept of this age group that “good girls” do not discuss or participate in nontraditional sex acts. Results on the survey reinforced this belief, as women age 71 and older had the highest number of incorrect responses on the pre test regarding oral sex and transmission of HIV.

Communication skills regarding safer sex practices were reinforced through discussion. During the discussion one of the participants stated that she felt it was not lady like to discuss past relationships with your current partner. Observation and results from pre and post test indicate that this was a sensitive topic as there were several missing responses for both pre and post test. The Health Belief Model was used and provided information that addressed perceived risks, and susceptibility. Facts regarding the high rate of HIV in Michigan reinforced the need to take an active position in preventing HIV/AIDS by talking about sexual history and using condoms. Although scores increased from an overall 40% on the pre test to 55% on the post it was evident through discussion that older women were not confident in their ability to talk about sexual history or safer sex practices with their partner. The Theory of Gender and Power



was utilized to empower women by examining old beliefs regarding women and their role in society and how those roles have shifted in society today.

Safer sex knowledge was reinforced throughout the presentation and discussion. Overall participants showed an increase from an overall 68% at pre test to 90% at post test. One of the questions asked participants to rate their level of importance when it came to using a condom every time they had sex. During the discussion it was mentioned by several of the participants that the need for condoms was not a concern. They stated that condoms expressed a lack of trust with sex partner, used only for preventing pregnancy, and that contracting HIV was not a major concern for them. When asked why, women responded that the majority of people who get HIV and AIDS are homosexuals, drug users and hookers. Once again concepts from the Health Belief Model and the Theory of Gender and Power were utilized to address perceived risks, susceptibility and women's role throughout history.

Self efficacy regarding condoms was measured using only two questions. The intent was to show whether or not women felt confident using a condom and applying a condom correctly. The results show that older women are not confident when it comes to condom use, as the post test overall average was 51% compared to 32% at pre test. This can be explained through the Theory of Gender and Power and the role of women in society placing them less informed and inexperienced regarding male contraception. Self efficacy was reinforced using hands on activity. The women were given prophylactics and a condom. Instructions and demonstration were provided by the health educator. Participants were placed into groups where they were able to practice applying a condom. This activity seemed to be enjoyed as several of the participants laughed and stated they

never imagined themselves putting on a condom. The health educator reinforced the need for women to become active participants in maintaining a healthy body and discussed how condoms are a key factor for doing so. Although there was an increase in participants score regarding condom use and communication it is the belief of the health educator that through practice and discussion with sex partner, older women will continue to develop confidence in their ability to practice safer sex.

### Strengths

Results of this study clearly show the need for HIV/AIDS education programs designed for women over the age of fifty. Lack of awareness regarding the need for HIV/AIDS programs for older women was evident as a considerable amount of time was spent on recruitment of participants as this age group expressed that they were not at risk for contracting HIV/AIDS. This workshop can be implemented in senior living centers, assisted living homes or retirement villages. As a pilot study it provides a baseline assessment tool for further studies as it reinforces the need for programs designed to address the concerns of older women regarding safer sex and HIV.

### Limitations

Limitations of this study include small sample size which may account for no correlations between age, race and education among participants. Diversity of the participants may also be a weakness as the study was comprised of mainly Caucasian women. Studies indicate that African American women are more apt to make changes in their sexual behavior and communicate more often with partner regarding condom use compared to white women (Lindau, 2006).

Due to the fact that this was a one time workshop there was no follow up with participants. Thus there is no way to determine if long term changes were obtained. This study was conducted as a pilot study only to show a need for HIV/AIDS education programs among older women.

This workshop was implemented as part of the requirements for the Masters program in Health Education. Introduction to the workshop provided women with information regarding the intent of this study as a school project. This may have contributed to the increase from pre test to post test scores.

### Conclusion

HIV is on the rise and women over the age of fifty are at risk. Studies show that women over fifty are not educated regarding HIV and often warning signs are dismissed as natural signs of aging (NIA, 2004). As the baby boomer generation grows older with each passing year the need becomes greater and greater for an HIV education program designed specifically for this population. This workshop is a pilot study and clearly shows the need for further research and workshops to educate older women about HIV/AIDS. By providing older women with skills and knowledge for safer sex practice, a decrease in the number of new HIV cases per year is possible.

### Recommendations

The Health Belief Model and the Theory of Gender and Power were used to develop this workshop and can be applied to create further workshops and increase knowledge among older women. Results of this study indicate a need for workshops tailored to meet the need of older women. Health educators need to become more active in tailoring programs specially designed to address the special needs of seniors.

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## Appendix 1

### HIV Prevention Workshop for Older Women Flyer

- Are you a women age 50 and older?
- Are you single and sexually active?
- Do you want to gain valuable knowledge regarding HIV?

If you answered yes to these questions, you may be eligible to participate in a research study to educate about HIV.

The purpose of this study is to examine how well an HIV program can increase knowledge and strengthen skills about safer sex with sexual partners to prevent HIV.

No monetary compensation will be given for participation in this study.

If interested please call Jeanne Kelly for more information at (810) 412-6031.

**Researcher:** Jeanne Kelly Graduate student in the Masters or Health Education program, Health Sciences and Administration Department, University of Michigan-Flint.

**Primary Investigator:** Shan Parker Ph.D., MPH. Health Sciences and Administration Department, University of Michigan-Flint. 810-762-3172

## Appendix 2

### Workshop Format and Activities

#### Workshop format

##### Introduction: (Activity 1)

- I. Introduce facilitator of workshop to participants

##### Participants consent to serve: (Activity 2)

- I. Pass out consent form (Appendix 3)
- II. Read Consent form
- III. Collect signed consent forms

##### Assessment of previous knowledge: (Activity 3)

- I. Pass out pre-test to participants (Appendix 4)
- II. Explain pre-test
- III. Collect pre-test

##### Presentation: (Activity 4)

- I. Hand out SEEDS educational packet (Appendix 5)
- II. Read SEEDS HIV educational packet to participants
- III. Guided discussion regarding information presented

##### Break (10 minuets)

##### Condom demonstration and practice: (Activity 5)

- I. Place participants into groups
- II. Pass out condoms
- III. Pass out prophylactic phallus (dildo)
- IV. Facilitator demonstrates proper condom application
- V. Participants practice applying condoms



- VI. Collect prophylactics and dispose of used condoms

Break (5 minutes)

Post Test: (Activity 6)

- I. Administer post-test (Appendix 6)
- II. Explain post-test
- III. Collect post-test

Workshop closure: (Activity 7)

- I. Thank participants for coming
- II. Explain what happens next
- III. Clean up

Sexual Empowerment and Educational Development for Seniors  
S.E.E.D.S.  
Activity 1  
Introduction

Materials Needed:  
None

Time: 5 min.

Health Educator: “Good afternoon ladies. My name is Jeanne Kelly and I am a Graduate student at the University of Michigan-Flint. I have asked you here today to participate in my thesis project, which is an HIV education workshop for older women. In order to graduate with a Masters in Health Education I must do a research project. This workshop is my research project. The workshop will take approximately 90 minutes.



## Activity 2

## Participants consent to serve

### Materials Needed:

Time: 5 min.

## Consent Form (Appendix 3)

Health Educator: “In order for me to talk with you and for you to be able to participate in this study you must agree to the terms of the study and sign a consent form. You may at anytime quit or leave the study, even after you have signed the consent form. This includes even after we start talking and doing activities. Your participation is voluntary and you can choose to leave at anytime.”

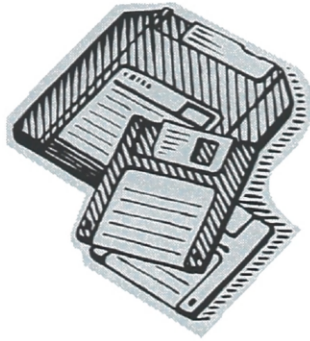
(Hand out consent form Appendix 3)

“I am going to read the consent form out loud. Please follow along. After the form is read if you agree to participate in this study please sign the form and pass it to the front of the classroom. If you have any questions or concerns feel free to ask and I will do my best to answer all of your questions.”

### A. Read consent form to participants

### B. Collect when completed

### Activity 3 Pre-Test



Materials Needed:  
Pre-Test (Appendix 4)

Time: 10 min.

Health Educator: “I am now handing out a questionnaire. The purpose of this is to determine how what you know about HIV and how confident you may feel talking about condom use with your partner. At the end of the workshop you will be another questionnaire. Do your best to answer all of the questions. If you have any questions during the questionnaire please feel free to ask.”

A. Hand out Pre-Test

B. Collect when finished

## Activity 4 HIV Education



Materials Needed:                      Time: 20 min.  
HIV Education Packet  
(Appendix 5)

Health Educator: “I am handing out the SEEDS HIV education packet. Once everyone has a copy we will begin. If you have any questions during the presentation please raise your hand and I will do my best to answer them.”

- A. Pass out SEEDS packet
- B. Read
- C. Questions and Answers

## Activity 5

### Condom Application

Materials Needed:

Time: 15 min.

5 educational male models

25 condoms

Health Educator: (place participants into groups of 4)

(Pass out prophylactic phalluses-one per group). “Ladies can you please look to the front of the classroom, Thank you. You each have before you one condom and one anatomical male model. I would everyone to watch me as I show you the correct steps to applying a condom. When I am finished I want you to practice putting on the condom as I have shown you. If you need any help ask and I will assist you”.

Health Educator: (Perform steps and say aloud each one as you do them).

**Step 1:** Check expiration date

**Step 2:** Open the package without using fingernails or teeth

**Step 3:** Squeeze air from condom upward

**Step 4:** Roll condom down to base of penis where it should fit snugly.

**Step 5:** Remove condom by re-rolling up the shaft of the penis and tugging from the tip without spilling the contents.

A. Clean up when finished

## Activity 6 Post-Test

Materials Needed:  
Post-Test (Appendix 6)

Time: 10 min.

Health Educator: “I am now handing out the second questionnaire form. The purpose of this is to determine what you have learned about HIV and how confident you are regarding talking to your partner about safer sex and using condoms. Do your best to answer all of the questions. You may notice that the questions appear the same as the first questionnaire and that’s O.K. I just want to see what you have learned. If you have any questions during this test please feel free to ask.”

A. Hand out Post-Test

B. Collect when finished

## Activity 7

### Workshop Closure

Health Educator: “I would like to thank everyone for their participant today. Please make sure that I have received your questionnaire. Later I will be going over the questionnaires and checking to see what was already known about safer sex practice and HIV/AIDS and you learned. Then I will write a report on this and submit it to the University of Michigan-Flint. At no time will any of your names be mentioned in the report. If you would like a copy on how the workshop went let me know and I will make one available to you. Thank you again for all your help in assisting me with my graduation.”

A. Clean up



Appendix 3  
S.E.E.D.S.  
Consent Form

**Project Title:** SEEDS- Sexual Empowerment and Educational Development for Seniors.

**Researcher:** Jeanne Kelly, Masters of Science Health Education student, University of Michigan-Flint.

**Primary Investigator:** Shan Parker PhD. M.P.H., Health Science and Administration, University of MI-Flint.

You are being asked to participate in S.E.E.D.S. which is an HIV/AIDS education workshop designed to increase knowledge regarding HIV/AIDS and decrease risk behaviors associated with HIV/AIDS. If you decide to participate in the study you will:

A. Participate in a one time educational session which will last approximately 90 minutes.

B. Will be asked to fill out a survey which will measure your knowledge of HIV/AIDS.

After completing the survey, you will be asked to:

C. Listen and participate in a discussion about transmission, risk behaviors, stages and symptoms of HIV/AIDS.

At the end of discussion you will be asked to:

D. Participate in a practice session about putting on condoms.

At the end of the educational session you will be asked to:

E. Complete a second survey to see what you have learned.

### Privacy and Confidentiality

Your privacy and confidentiality will be protected. No names will be used on the study forms. You will be assigned an ID number to protect your privacy.

Your consent form which will have your name on it will be kept separate from the surveys in order to protect your privacy. All study forms will be kept locked away from public view. Your name will not be used in any reports resulting from this study and all records will be destroyed after the study. Records will be kept confidential to the extent provided by federal, state, and local law. However the Institutional Review Board and Dr. Shan Parker, University of Michigan-Flint, are responsible for monitoring this study may inspect these records. A copy of this document will be kept together with the research records of this study.

### Voluntary Participation

Taking part in this study is voluntary and at anytime you wish to stop participating in the study you may do so without penalty. This includes after signing the consent form and during any part of the workshop.

### Risk and Benefits

There is no harm to you for being a part of this study. However you may feel some discomfort in talking about sexuality, HIV/AIDS, and condom use. At any time you feel that you cannot answer a question or participate in any activity you may choose to stop. You may still however participate in other activities if you wish.

Benefits to participants in the study may include increase awareness and knowledge regarding HIV/AIDS, increase confidence regarding condom use, and increase confidence about talking about safer sex practices with sexual partner.

There is no cost to you by volunteering for this study. The researcher will provide all materials needed.

## Consent

I understand my participation in this study is voluntary. I understand that I may stop participating in the study at any time with no penalty or loss of benefits to me, even after giving my consent to participate.

### **If you agree to participate, please read and sign below:**

I have read and understand the information in this consent form. I agree to participate in this study. One copy of this document will be kept with the research records on this study. A second copy will be given to me today.

### **Printed Name of Participant**

\_\_\_\_\_

First

Last

**Date:** \_\_\_\_\_ **Signature** \_\_\_\_\_  
(Participant)

**Date:** \_\_\_\_\_ **Signature** \_\_\_\_\_  
(Witness)

**Date:** \_\_\_\_\_ **Signature** \_\_\_\_\_  
(UM Primary Investigator)

Appendix 4  
S.E.E.D.S.  
Pre-Test

**INSTRUCTIONS:** Place an X next to the appropriate answer. Please do your best to answer all of the questions. If you do not know the answer place an X at what you feel is the correct answer is. If at any time you do not understand a question please ask for help.

1. How old are you:

- ☐ 50-55
- ☐ 56-60
- ☐ 61-65
- ☐ 66-70
- ☐ 71 and older

2. How do you describe yourself:

- ☐ African American
- ☐ Asian/Pacific Islander
- ☐ Latino American
- ☐ Hispanic
- ☐ Native American
- ☐ European American (White)

3. Education level:

- ☐ 8<sup>th</sup> grade and below
- ☐ Some high school (did not graduate)
- ☐ High school graduate
- ☐ Some college
- ☐ College graduate (Please circle A.A., B.A., Masters, PH.D.)

4. Only homosexual (gay) people get HIV/AIDS:

- ☐ True
- ☐ False

5. Condoms are only used to prevent pregnancy:

- ☐ Yes
- ☐ No

6. HIV can be transmitted by having oral sex:

- ☐ True
- ☐ False

7. Older women are not at risk for HIV:

- ☐ True
- ☐ False

8. How confident do you feel in talking about condom use with your partner:

- ☐ Very confident
- ☐ Somewhat confident
- ☐ Not at all confident

9. How important do you feel it is to use a condom every time you have sex:

- ☐ Very important
- ☐ Somewhat important
- ☐ Not at all important

10. How confident are you that you will use a condom consistently with your partner:

- ☐ Very confident
- ☐ Somewhat confident
- ☐ Not at all confident

11. HIV can be cured:

- ☐ True
- ☐ False

12. HIV is the virus that causes AIDS:

- ☐ True
- ☐ False

13. There are different stages of HIV infection:

- ☐ True
- ☐ False

14. HIV is transmitted through (Check all that applies):

- ☐ Blood
- ☐ Saliva
- ☐ Semen
- ☐ Vaginal fluids

15. Flu like symptoms can be a sign of HIV infection:

- ☐ True
- ☐ False

16. I am confident in my ability to put on a condom correctly:

- ☐ Very Confident
- ☐ Somewhat Confident
- ☐ Not at all Confident

17. Having unprotected sex is safe:

- ☐ Yes
- ☐ No

18. Sharing needles for prescription medicine is safe:

- ☐ True
- ☐ False

19. I can talk to my partner about condom use:

- ☐ Yes
- ☐ No

20. I can tell that someone has HIV by looking at them:

- ☐ True
- ☐ False

21. Before using a condom it is important to check (check all that applies):

- ☐ The color
- ☐ The expiration date
- ☐ The name brand

22. I can talk to my doctor about safer sex practices (using condoms):

- ☐ Yes
- ☐ No

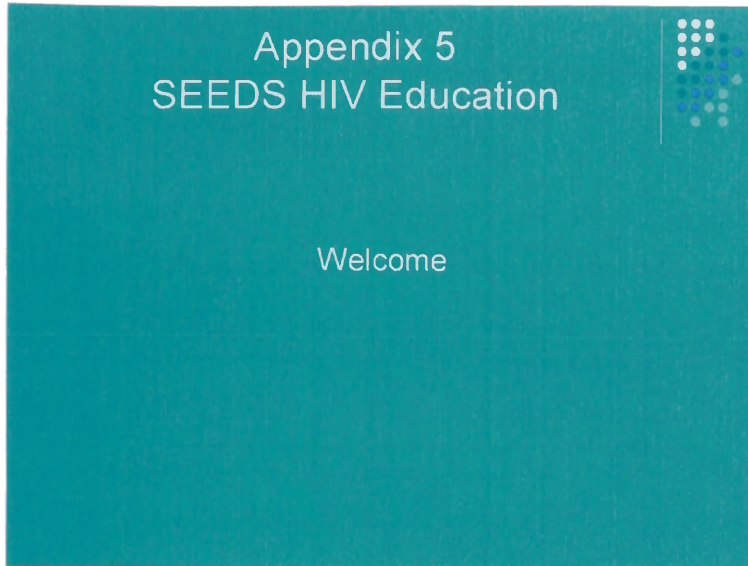
23. I can talk to my partner about my sexual history:

- ☐ Yes
- ☐ No

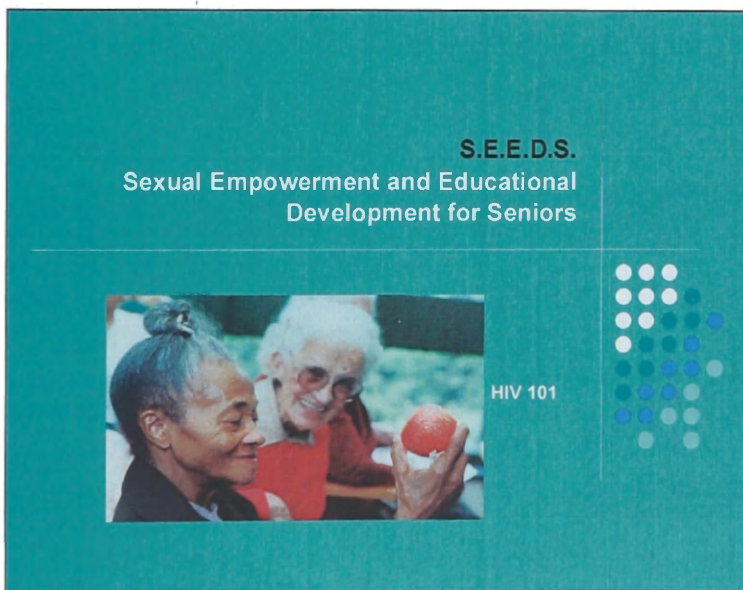


Appendix 5  
Education Presentation



Slide 1



Slide 2



Slide 3



## WHAT IS HIV ?


- **HIV** = Human Immunodeficiency Virus

It is a virus that destroys your immune system.

Your immune system is what protects you from infections.

HIV is the virus that causes AIDS

Slide 4



## What is AIDS ?

**AIDS** stands for:

Acquired Immunodeficiency Syndrome

People with AIDS can **not** fight off infections because their immune system has become too weak.

Slide 5

## MYTHS ABOUT HIV/AIDS



- Only homosexuals or injected drug users get HIV/AIDS.
- You can HIV/AIDS from public toilet seats.
- There is a cure for HIV/AIDS.

Slide 6

## MYTHS ABOUT HIV/AIDS



- You can get HIV/AIDS through casual contact such as holding hands.
- Having a vasectomy protects you from getting HIV/AIDS.
- You can tell someone has HIV by looking at them.

Slide 7

## Facts about HIV/AIDS

- Heterosexual women get HIV.
- In the United States **women** account for nearly **60% of all AIDS cases**.

Slide 8

## Facts about HIV/AIDS

- In Michigan approximately 11 thousand people are infected with HIV.
- Around **19%** of all people with HIV/AIDS in the United States are **age 50 or older**.



Slide 9

## Risky Behaviors ???

- Risky behaviors are behaviors that put you at risk for getting HIV

Some risky behaviors are:

- Sharing/Exchanging needles-this includes needles used for prescription drugs (Diabetic?)
- Multiple sex partners-unprotected oral, anal or vaginal sex with more than one partner

Slide 10

## HIV: How is it transmitted ?

Through infected body fluids:

- Blood
- Semen
- Vaginal Fluids
- Breast Milk

Slide 11

## Stages of HIV/AIDS

There are 4 stages of HIV/AIDS

- Stage 1- Infection
- Stage 2-Asymptomatic
- Stage 3-Symptomatic
- Stage 4-AIDS

Slide 12

## Stage 1: Infection



- During this stage you have become infected with HIV by engaging in risky behaviors.
- You may have flu like symptoms, which is often the first sign of HIV.

Slide 13

## Stage 1: Infection

You get tested for HIV but it comes back negative.

In some cases it may take up to 30 days for HIV to show up in your system. This is called the window stage.

Slide 14

## Stage 1: Infection

In most people the virus will show up in 3 months in your system.

It is important to get re-tested if you have been exposed to HIV.

Slide 15

## Stage 2: No Symptoms

In this stage you have been exposed to HIV but show no signs of having the virus.

Some people can have no symptoms of HIV for up to 10 years. They feel great and do not get tested.

They can still spread the virus on to others.

Slide 16

## Stage 3: Symptomatic

Symptoms of HIV start to show and cause havoc on your immune system.

Symptoms appear as flu like such as:  
nausea, diarrhea, fever, sore throat,  
rash.





Slide 17

### Stage 3: Symptomatic

Night sweats may occur.

Yeast infections are also common.

These symptoms are **chronic** which mean that **they keep coming back**.

Slide 18

### Stage 4: AIDS

- In this stage your immune system **can no** longer fight off infections. You become sick easily and you develop AIDS.

Slide 19

## What makes older women at risk?

As we age our vaginal walls become thinner.

Many older women will suffer from vaginal dryness.



Slide 20

This means we can tear more easily during sexual intercourse. Leaving an opening for HIV to enter into our bodies.

Using lubrication will help prevent tearing. Wearing a condom keeps unwanted HIV infected semen from making its way into our blood system.

Slide 21

## Men on the prowl

- There are more women than men. Only 7 men for every 10 women.
- Older men who once may not have been able to perform are now able thanks to Viagra.
- What does this mean to you?



Slide 22

## Are you a mind reader ?

Some men may be playing the field. Having multiple sex partners and not using protection.


Putting you at risk for contracting an STD or HIV.



Slide 23

## Online dating services


Pre-Screening does not mean that the person was tested for HIV.



Slide 24

## Communication

- It is important to talk to your partner about sexual history.
- Ask if they have had unprotected sex
- Ask if they have more than one partner





Slide 25

## Communication

- Remember the first signs of HIV often resemble that of the flu.
- Often HIV/AIDS are mistaken for normal signs of aging.
- Talk to your doctor about HIV if you are sexually active.
- Talk to your partner about condoms

Slide 26

## Women's work



- Women have always taken care of others, as a wife, mother, sister, or aunt.
- Remember it is important to take care of yourself.



Slide 27


## Keep informed, Keep Healthy

Practice safer sex: Use a condom every time you have sexual intercourse.

Use lubrication to prevent tearing.


When having oral sex, make sure you have a barrier between you and your partner.

If you must reuse needles, Clean them with BLEACH.



Slide 28

## ANY QUESTIONS?



Appendix 6  
S.E.E.D.S.  
Post –Test

INSTRUCTIONS: Place an X next to the appropriate answer. Please do your best to answer all of the questions. If you do not know the answer place an X at what you feel is the correct answer is. If at any time you do not understand a question please ask for help.

1. Only homosexual (gay) people get HIV/AIDS:

- ☐ True
- ☐ False

2. Condoms are only used to prevent pregnancy:

- ☐ Yes
- ☐ No

3. HIV can be transmitted by having oral sex:

- ☐ True
- ☐ False

4. Older women are not at risk for HIV:

- ☐ True
- ☐ False

5. How confident do you feel in discussing condom use with your partner:

- ☐ Very confident
- ☐ Somewhat confident
- ☐ Not at all confident

6. How important do you feel it is to use a condom every time you have sex:

- ☐ Very important
- ☐ Somewhat important
- ☐ Not at all important

7. How confident are you that you will use a condom consistently with your partner:

- ☐ Very confident
- ☐ Somewhat confident
- ☐ Not at all confident

8. HIV can be cured:

- ☐ True
- ☐ False

9. HIV is the virus that causes AIDS:

- ☐ True
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10. There are different stages of HIV infection:

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- ☐ False

18. Before using a condom it is important to check (check all that applies):

- ☐ The color
- ☐ The expiration date

- The name brand

19. I can talk to my doctor about safer sex practices:

- Yes
- No

20. I can talk to my partner about my sexual history:

- Yes
- No